

Norman H. Bangerter Governor Suzanne Dandoy, M.D., M.P.H. Executive Director Kenneth L. Alkema

DEPARTMENT OF HEALTH DIVISION OF ENVIRONMENTAL HEALTH

288 North 1460 West P O Box 16690 Salt Lake City, Utan 84116-0690 (801) 538-6121

July 2, 1990

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Mr. Ed King Jumbo Mining Company 6305 Fern Spring Cove Austin, Texas 78730

Dear Mr. King:

Thank you for your recent submittal of June 1, 1990, that included chemical data, a water level map and neutron logs for the Jumbo Mine, near Delta, Utah.

We have reviewed the data and note that you have only sprinkled Pad No. 2, and that you have not sprinkled the other three approved pads. There is cyanide in 2 of 20 observation wells. As stated by you, the cyanide in shallow well #17 may have come from pad No. 3, judging from the water level map; in well #8 it may have come from heap No. 6 or possibly from several other undetermined sources, such as spills, ponds or storage areas.

Our comments are as follows:

1. The water level map and other available data are insufficient to conclusively determine the source of the cyanide in the wells. Therefore, we believe the drilling of more test holes to improve the water level map and analyses of new water samples is necessary. This task may locate other problem areas.

Additional drilling of shallow holes is also requested to determine the extent of cyanide contamination and to develop and implement a clean-up plan. Remediation maybe required where the ground water is contaminated. Please devise a drilling program and submit for our approval by August 15, 1990. This information will also be useful in processing a ground water permit for a new facility.

2. The four presently approved pads are more than five years old and were approved and built with lesser technology and construction techniques than required at the present time. Therefore, we reaffirm the Bureau's position as stated in our December 14, 1988 and March 16, 1989 letters that heap leach pads which were authorized by construction permit may be leached only until October 1, 1990. Jumbo Mining was advised verbally of the restricted nature of these properties during your first visit in July 1988 and in our letter dated July 21, 1988. An official statement concerning these properties and their limited potential is clearly outlined in our letter of September 23, 1988 of which Jumbo mining was aware before purchasing the property.

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3. According to the information we have received from the Division of Oil, Gas and Mining, they have not approved your testing of pads No. 2 and No. 7, because the bonding requirements have not been resolved. If the bonding issue is resolved and you wish to make the test, please advise us when you start. If the test is successful, you will need a ground water permit to leach these pads. Because of charges for permits, it would be to your benefit, if possible, to include all permitted activities at one time, and have a meeting with us to identify the minimal requirements for review. You need to address the foregoing issues in detail as soon as possible.

Should you decide to build a new heap leach pad, you will need to obtain a ground water permit and a construction permit from the Bureau. You will probably need the services of a consulting engineer to assist in meeting all the technical requirements of the regulations. The enclosed draft heap leach regulations contain our current requirements, and you will need to contact Dave Rupp for further details. The ground water information that we will want, prior to issuing a permit for a new pad, will depend on the location you select for the site. Format for ground water discharge permit application is specified in R448-6-6.3.

If you have any questions, contact Mack Croft or Dave Rupp at 538-6146. We are enclosing documents for your information.

Sincerely,

Don A. Ostler, P.E., Director Bureau of Water Pollution Control

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Enclosures: as noted

cc: Division of Oil, Gas and Mining

Roger Foisy, Central Utah District Engineer Bureau of Land Management, Fillmore, Utah Western States Minerals

MGC:kc Q: edking.ltr